

CALL FOR BIDS SPECIFICATIONS

Three (3) New Cab & Chassis Plow Trucks Minimum 60,000 GVWR

1.0 Minimum Technical Requirements

Prototype units are unacceptable. All units bid must be standard production models and must have been in production and available on the open market for a period of twelve months prior to the bid opening date.

Flathead County Road Department reserves the right to change the quantity at the time of the pre-award conference.

Provide and deliver, F.O.B. Flathead County Road Department of Kalispell, MT 60,000lb GVWR Cab and Chassis Diesel Trucks.

Note: Manufacturer's literature must accompany all bids.

Make and model bid: _____	Comply to spec. YES NO		Deviations from Specifications
1.1 <u>Color</u> (a) The cab, hood, fenders, and doors shall be Custom yellow paint code or equal and be base coat - clear coat finish. All other painting shall be standard production color(s). Paint code shall be provided.			
1.2 <u>Cab and Chassis</u> - (conventional cab required) (a) All windows shall be tinted safety glass (rear window included). Front window shall be heated. (b) Seats shall be factory installed. 1. Driver's seat shall be a cloth heavy duty low profile base, high back with head restraint and shall have florescent orange or green seat belt, right-hand arm rest, air lumbar, air suspension type with four-way adjustment National or Bostrom brand only will be accepted, (armrest on door mount is acceptable substitute for left side). 2. The passenger seat shall be cloth standard high back with head restraint and shall have florescent orange or green seat belt. (c) Floor access shall be provided on passenger side of cab for MDT personnel to access hydraulic pump and drive line..			

<p>(d) Instrument panel shall have all necessary gauges grouped within clear view from the operator's position and shall include the following (instruments may be analog, digital or both):</p> <ol style="list-style-type: none"> 1. Fuel and DEF gauge. 2. Ammeter or voltmeter. 3. Air pressure gauge with low-pressure audio warning. 4. Speedometer. 5. Oil pressure and water temperature gauges, both of which shall have visual (lamps) and audio (buzzer) warning systems for low oil pressure and high-water temperature. 6. Tachometer. 7. Continuous hour meter, dash mounted, if applicable. 8. Six (6) auxiliary switches, dash mounted, with circuit breaker or fuse protection rated at minimum 15 amps with terminated customer access, powered on and off by key no exceptions. 9. Dash mounted PTO switch. <p>(e) Two heavy-duty electric intermittent windshield wipers with windshield-washers.</p> <p>(f) Arm rests on each door if not provided on seat.</p> <p>(g) Auxiliary 12-volt power point.</p> <p>(h) Dual sun visors.</p> <p>(i) Dome light.</p> <p>(j) Dual air horns or dual tone single trumpet to be mounted on top of cab complete with snow shields, if applicable.</p> <p>(k) Electrical horn.</p> <p>(l) The cab shall be equipped with dual heated and motorized mirror on right and left side approximately 6-inches x 16-inches that fold when struck. Must furnish weather pack connectors if not hard wired. A separate adjustable approximately 7-inch convex mirror shall be attached to the main mirror with supporting rods, on each side. Inside cab rearview mirror is not required. Manufacturer's standard heavy-duty fender mount blind spot approximately 8-inch convex mirrors shall be supplied on both front fenders.</p> <p>(m) Fuel tank shall be two (2) step tank ICC approved with minimum capacity of hundred(100) gallons to be located on the</p>			
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	<p>driver's side. Stainless steel or aluminum will only be excepted. DEF can be mounted in front or behind fuel tank. Fuel and DEF tank combination shall not extend beyond the rear of the cab by more than 12 inches. This also includes SCR system on the passenger side.</p> <p>(n) Hand grabrails shall be mounted vertically either behind both doors or inside each door. The length shall be not less than 8-inches.</p> <p>(o) The hood and fenders shall tilt forward for easy access to engine compartment. Stationary grill and radiator required. Will include chrome grill and chrome air intake. Rock guard (inner fenders to protect radiator and fan from road debris) and bug screen shall be provided (screen shall cover entire radiator and other cooling components).Must have 3.5" fender extensions.</p> <p>(p) Radio-AM-FM. An exterior antenna shall be provided (dealer installation acceptable - windshield type antenna unacceptable).Bluetooth capable.</p> <p>(q) Common key for door and ignition, if available [minimum two (2) keys per unit] key codes must be provided.</p> <p>(r) Front bumper shall be provided.</p> <p>(s) Full length, heavy duty insulated rubber floor covering, with removal floor mats.</p> <p>(t) Cab cold climate insulation package shall be manufacturer's premium package.</p> <p>(u) Steering wheel diameter shall be 18-inches.</p> <p>(v) Shall have tilt and telescoping steering wheel.</p> <p>(w) Shall have electric windows and door locks.</p> <p>(x) Air conditioning.</p> <p>(y) Vehicle speed sensor output (to be used by FCRD for deicer applications). Location to be discussed at pre-award.</p> <p>(z) Air ride cab suspension.</p>			
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<p>1.3 <u>Frame:</u></p> <p>(a) The frame section modulus and tensile strength of the steel shall have a minimum Resistant Bending Moment (RBM) not less than 2,200,000 inch/lb. using single frame rails.</p> <p>(b) Frame rails must be clear from back of cab to rear axles, including area below rails to ground. The only exception to this will be the battery box, air tanks and heated fuel / water separator. Location of these will be discussed at the pre-award.</p> <p>(c) The frame length shall be as follows:</p> <ol style="list-style-type: none"> 1. Bumper to back of cab shall be a minimum of 114-inches. 2. Minimum 20-inch integral front frame extension (this will be used for the Department to mount heavy duty front frame mounted snowplow hitch). 3. A cab-to-axle of 124-inches to 128-inches. 4. The back of cab to end of frame shall be a minimum of 180-inches. 5. Wheelbase shall be a minimum of 210-inches. <p>(d) Two (2) front tow hooks shall be provided (installation not required).</p> <p>(c) Cab and chassis frame shall have a level ride height front and rear axles no exceptions.</p>			
<p>1.4 <u>Tires:</u></p> <p>(a) Front tires shall be 315/80R22.5 L tubeless radial.</p> <p>(b) Rear tires shall be 11R22.5 G tubeless radial mud and snow Bridgestone M770 or M799.</p>			

<p>1.5 <u>Wheels:</u></p> <p>(a) All wheels, including spare, shall be heavy-duty 10-hole steel disc hub piloted and shall be of the same manufacturer.</p> <p>(b) Front and spare wheels shall have a minimum 9.0-inch rim with a minimum 9,000-lb. rating.</p> <p>(c) Rear wheels shall have a minimum 8.25-inch rim with 120-psi inflation and 7200-lb. rating.</p> <p>(d) All wheels shall be powder coated.</p> <p>(e) Nylon wheel guards will be placed between wheels and hubs on all locations to prevent wheels from rusting to hubs.</p>			
<p>1.6 <u>Brakes:</u></p> <p>(a) Front and rear disc brakes required. Brakes shall meet or exceed current federal regulations for stopping distance.</p> <p>(b) Full 360-degree brake dust cover on all wheels.</p> <p>(c) Suspended brake pedal (not mounted to floor).</p> <p>(d) Parking brake with dash mounted quick release valve shall be provided.</p> <p>(e) Trailer towing package, air and electric lines to end of frame. Tractor protection control valve and hand operated trailer brake control valve will be provided.</p> <p>(f) Air reservoir shall be equipped with a manual drain cock. A Schrader valve stem air-charging port shall be provided so that the air brakes can be released by an external air source.</p> <p>(g) Manufacturer's standard mount for service and parking brakes.</p> <p>(h) Meritor automatic slack adjusters or equivalent shall be provided on front and rear brakes.</p> <p>(i) Heated air drier with replaceable spin on filter shall be provided.</p>			

<p>1.7 <u>Engine:</u></p> <p>(a) The engine shall be a minimum 12.4L SAE gross horsepower of 470 and peak torque of 1650 lbs. at 1000 – 1800 RPM, governed speed shall be 1625 to 2100 RPM.</p> <p>(b) ECM shall be programmed from the factory to limit speed to 75 mph and limit idle time to no more than 10 minutes.</p> <p>(c) A minimum two (2) position, Jacobs-style engine brake.</p> <p>(d) Must either have 1310 or 1350 adapter flange for front mount PTO hydraulic pump.</p> <p>(e) Oil pan shall have non-corrosive characteristics to prevent corrosion.</p> <p>(f) Filters shall provide severe service duty and:</p> <ol style="list-style-type: none"> 1. Air cleaner with a pop-out or dial type, dash mounted (preferred) air restriction indicator if mounted in engine compartment must have a warning light dash mounted. 2. Inside / outside air inlet with in-cab controls. 3. Manufacturer's standard heated fuel water separator with a sight bowl. <p>(g) Cooling System</p> <ol style="list-style-type: none"> 1. Weather fronts shall be provided if required to maintain normal engine operating temperature. 2. Radiator shall be <u>heaviest duty</u>, highest capacity option available. 3. Anti-freeze shall be extended life and rated to -34°F. 4. A 110/120-volt A.C., 1500-watt minimum electric engine block heater shall be supplied. The block heater electrical cable shall connect to a weatherproof receptacle mounted on the left side under door. 5. Manufacturer's standard fan hub that meets or exceeds engine manufacturer's cooling requirements. <p>(h) Exhaust system (under frame preferred) shall be a horizontal muffler with a single vertical right-hand tailpipe with heat guard and shall have a 13-inch ground clearance. Overall height for exhaust cannot be over 10.6-inch.</p>			
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<p>(i) Provide engine manufacturer's approved, factory installed cold weather starting aid.</p> <p>(j) Air compressor, minimum 15.9 cubic feet, air compressor intake will be through engine air cleaner.</p>			
<p>1.8 <u>Front Axle & Springs:</u></p> <p>(a) Front axle shall be manufacturer's standard rated capacity of not less than 20,000 lbs. Road clearance from the bottom of the axle to the ground shall be not less than 10½ inches with the tires and wheels specified.</p> <p>(b) Front springs shall be rated at 20,000 lbs. (10,000 lbs. each side)</p> <p>(c) Steering shall be dual gear type.</p> <p>(d) Oil bath or unitized hubs on front axle.</p> <p>(e) Set forward front axle will only be accepted. Setback front axle is unacceptable.</p> <p>(f) The front axle shall have heavy-duty shock absorbers</p>			
<p>1.9 <u>Transmissions, Clutch, Drive Line and Rear Axle:</u></p> <p>(a) Transmission shall be 18 speed manual.</p> <p>(b) The clutch shall be heavy duty and rated to handle engine torque and shall include a transmission brake.</p> <p>(c) The driveline shall be factory balanced Spicer 1810 heavy duty or approved equal.</p> <p>(d) Rear tandem drive axles with power divider, that shall include an air activated lockout mechanism, driver activated. Driver control traction differential in rear axle.</p> <p>(e) Rear axle shall have a lubrication pump and shall be a Meritor or Spicer with a manufacturer's rated capacity of 40,000 pounds.</p> <p>(f) Rear suspension shall be Hendrickson Haulmax with a capacity not less than 40,000 lbs. and 54-inch axle spacing.</p> <p>(g) Magnetic drain plug for axles.</p> <p>(h) The gear ratio shall be 411 gear ratio.</p> <p>(i) A heavy-duty, factory balanced, half round or full round Spicer connector driveline or approved equal shall be provided.</p>			

<p>1.10 <u>Electrical System:</u></p> <p>(a) The alternator shall be heavy duty, have an output not less than 180 amperes at 12 volts.</p> <p>(b) Shall be 12-volt.</p> <p>(c) Three (3) batteries with minimum combined 2700 cold cranking amps. Battery box shall be frame mounted.</p> <p>(d) A heavy-duty battery disconnect shall be provided in the cab, within easy access from the driver's side of the vehicle. Wire connections shall be sealed in a watertight box for corrosion purposes.</p> <p>(e) Units shall have electrical noise suppression to reduce or eliminate noise interference to two-way radio reception and transmission.</p> <p>(f) Power control module (body builder connector) shall be mounted in cab. Behind driver's seat preferred or behind / underneath passenger seat.</p> <p>(g) <u>Shall provide wiring for snowplow lighting, headlight, turn-signal and fog lights. Switch for fog lights mounted in dash.</u></p> <p>(h) Vehicle interface wiring shall be provided to the end of frame with a weather tight connector (brake, tail, reverse and turn signal wiring).</p>			
<p>2.0 <u>MANUALS</u></p> <p>Electronic and paper manuals shall be provided that cover parts, service, wiring diagrams and all major components including the engine per each unit bid.</p> <p>Diagnostic Software for Body, Engine and Transmission system.</p> <p>1. Shall be included for trouble shooting.</p> <p>Diagnostic software shall be compatible with FCRD system environment which includes.</p> <ul style="list-style-type: none"> • Microsoft Windows 10 OS • 32/64bit operating system • 4 GB of memory • Microsoft active directory domain • Internet explorer v10 • Private firewall network • Multiple users per desktop • USB compatible • No elevated or administrative rights required to function. 			

<p>2.0 <u>TRAINING</u></p> <p>If requested by Corey Pilsch, Fleet and Shop Supervisor within a period of thirty (30) days after the units are put into service, at no cost to the County, the vendor shall provide a qualified factory-authorized service representative(s) for training as follows:</p> <p>Locations: To be discussed at Pre-Award</p> <p>a) Four (4) hours operator training in operation and normal maintenance of the unit and all components.</p> <p>b) Sixteen (16) hours mechanic training in maintenance and adjustment of the unit and all components.</p>			
<p>Units may be delivered by carrier or may be "piggy-backed" to the dealer's in-state location, If Flathead County Road Department unit is used the warranty shall begin with the mileage on that unit at the F.O.B. Location.</p>			

Note: Delivery date for the 3 trucks ordered to be delivered after July 1, 2021.

This is an all or none bid.

QUOTE SECTION 1

Provide and deliver F.O.B, Kalispell, Montana, manufacturer's current model, 60,000lb GVWR diesel powered cab and chassis as per the above minimum specifications and requirements.

Cost per each: \$ _____

Make and Model: _____

Delivery Date: _____

Warranty: _____

